

CURRY CREEK

The literature review for Curry Creek did not result in any information related to:

- Existing Water Quality Data
- Water Temperature Data
- Benthic Macroinvertebrate Data
- Physical Habitat Data
- Fishery Resource Data
- Fish Passage or Screening Data

I reviewed all of the pertinent environmental documents produced by the City of Roseville and searched the fisheries files at the California Department of Fish and Game's Region 2 office. Since Curry Creek is currently intermittent, environmental documents focus on wetlands, vernal pools, and riparian issues, but not on water quality, benthic macroinvertebrates, or fishery resources. In fact, CDFG does not even have a file for Curry Creek, let alone any data in that non-existent file. However, I did visit all of the accessible road crossings of the channel and during several flights looking for salmon in other drainages, did fly over the stream channel on several occasions. During the stream videography project in March 2003, we did not fly Curry Creek because of time and priority constraints. Therefore, my assessment of this stream's potential to support anadromous fish is based on my limited road crossing and several over flight observations. *[This assessment is basically repeated in the Assessment Report prepared for Placer County].*

A. Water Quality

Assessment: Observations of water quality left me with one solid observation and one impression. During the fall and early winter the turbidity levels were high, with the water being chocolate brown in color. The impression that I have is that nutrient levels might be unsuitable for anadromous fish, should they ever enter the system. This impression is based on the amount of aquatic vegetation growing in the channel, during the winter period and an overall sense of high botanical productivity in the immediate channel area.

B. Water Temperature

Assessment: Although no data is available, my belief is that water temperatures, if perennial flow were to become the norm, would be unsuitable in summer for juvenile salmonid rearing. I base this conclusion on two factors. First, the volume of flow in the channel would be low, unless an artificial discharge supplemented the natural flow, resulting in rapid heating during the spring and summer months. Second, the gradient of the channel is very low which would result in long residence times for water and thus greater opportunity for temperature increases.

C. Benthic Macroinvertebrates

Assessment: In the event the channel did become perennial at some future date, I speculate that the substrate would be composed of fine particles to coarse sand. This substrate would support a low diversity and numbers of organisms that would be suitable as a food source for salmonids.

D. Physical Habitat

Assessment: This stream channel is very low gradient and the surrounding soils are mostly fine textured. Given these constraints, I do not believe that this stream could ever possess the physical characteristics to support salmonid species. The lack of stream power to scour pools and gravels, if any gravel even exists under the existing channel, would render this stream unsuitable as habitat for anadromous salmonids. Also, the lack of sediment transport ability would further hinder the likelihood that suitable conditions could be created. A lack of riparian vegetation would also limit the potential development of habitat complexity.

E. Fishery Resources

Assessment: Based on the location, gradient, soils, and other factors associated with this channel, I believe that this stream has close to zero potential as an anadromous fish stream. The current conditions, and I believe most likely future conditions in the channel do not meet most, if any, of the requirements necessary to support anadromous fish. I do believe that this channel should be kept intermittent, if possible, to avoid false attraction of anadromous species and to minimize the introduction or expansion of undesirable warmwater fish species into other watersheds.

F. Fish Passage or Screening

Assessment: During the over flights, I believe I did see several beaver dams in the lower portion of the drainage, but cannot confirm that observation as fact. If by some chance stream conditions became suitable for anadromous fish, then the beaver situation would have to be dealt with in the manner recommended for other watersheds.